

Abstract

A transmitting device includes a light-emitting device for outputting a laser beam, a temperature regulator for regulating the temperature in the light-emitting device, a wavelength monitor device for receiving the laser beam from the light-emitting device after it has passed through a optical filter thermally coupled with the light-emitting device, a control unit for controlling the temperature in the temperature regulator based on the signal outputted from the wavelength monitor device such that the lasing wavelength in the laser beam outputted from the light-emitting device will be locked at a predetermined locked wavelength, a temperature-sensing unit for sensing the temperature in the optical filter, and a correcting unit for outputting a correction signal toward the control unit based on the temperature sensed by the temperature-sensing unit, the correction signal being operative to command the correction of any deviation in the locked wavelength associated with the temperature characteristic in the optical filter. The light-emitting device, wavelength monitor device, temperature regulator and optical fiber together define an optical module.